

## Draft Executive Summary

### Economic Sustainability Plan for the Sacramento-San Joaquin River Delta

The Sacramento-San Joaquin River Delta is a unique place of economic, environmental, historic and cultural significance. The land and water resources of the Delta support significant agricultural and recreation economies, and the Delta also has an important role as an infrastructure hub for water, energy, and transportation. The region's rich history boasts of bustling, river-based commerce before the automobile age, and its cultural uniqueness includes the only rural town in America built by early Chinese immigrants. As the largest estuary on the west coast of the Americas, the Delta also is a place of striking natural beauty and ecological significance that is struggling with serious environmental degradation problems. Although surrounded by growing cities, the Delta remains a highly-productive agricultural area with rural charms, landscapes, and waterscapes not found elsewhere in California.

In recent years, there has been great concern over increasing environmental degradation in the Delta and over court decisions that reduced the quantity of water delivered to southern California through the state and federal water project intakes in the south Delta to protect endangered fish. Combined with additional concerns about the stability of the Delta's levee system, these concerns led the California legislature to pass the Delta Reform Act of 2009. The Act created the Delta Stewardship Council and charged it with developing a Delta Plan to achieve the coequal goals of "providing a more reliable water supply for California and protecting, restoring, and enhancing the Delta ecosystem."

Recognizing the potential impact of the Delta Plan on the people and economy of the Delta, the Delta Reform Act stated that the coequal goals of water supply reliability and restoring the Delta ecosystem "shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place." Among the measures to address this goal, the Delta Protection Commission was tasked with developing this Economic Sustainability Plan to inform the Delta Stewardship Council's development of the Delta Plan.

The concept of economic sustainability and the objective to "protect and enhance the unique cultural, recreational, natural resources, and agricultural values of the California Delta as an evolving place," can be interpreted in different ways. In economic terms, most stakeholders agreed that a minimum requirement is to maintain the economic value of the entire Delta economy in the future, and many believed in a stronger interpretation of enhancement of every key economic sector. The Fifth Staff Draft of the Delta Stewardship Council's Delta Plan uses performance measures that follow this stronger interpretation of economic sustainability where growth in one sector is not a substitute for deterioration in another area. In contrast, non-Delta water interests take a narrower view, and claim that "evolving place" means that the Delta is in a state of inevitable decline and only a handful of "unique" values need to be protected. Regardless of the interpretation, it is clear that the Stewardship Council must consider the Delta economy when preparing the Delta Plan. In addition, most stakeholders agree that this objective requires the protection of the cultural and historical heritage and the long-term economic viability of the Delta's historical Legacy Communities.

The Economic Sustainability Plan (ESP) measures the key elements of the Delta economy, develops strategies to enhance the economy, and analyzes the impacts of several important proposals for the Delta Plan on the region's economic sustainability. The analysis in this Economic Sustainability Plan shows that it is possible to protect and enhance the Delta economy and be consistent with the coequal goals. The ESP finds that a large investment in strengthening the Delta's levee and emergency response systems is a cost-effective approach to improving water supply reliability, economic sustainability in the Delta, and reliable energy, transportation, and water infrastructure that serves statewide interests. The ESP also finds that most proposals for ecosystem restoration can be consistent with economic sustainability.

## **The Economy and Infrastructure of the Delta: Baseline, Trends, and Strategies for Improvement**

The boundaries of the Legal Delta are shown in Figure A. The Delta Protection Act of 1992 defined the Delta boundaries including the Primary and Secondary Zone and created the Delta Protection Commission, charging it with developing a Land Use and Resource Management Plan for the Primary Zone. The majority of the Delta's 738,000 acres of land is in the rural and agricultural Primary Zone. The population of the Primary Zone is approximately 12,000 and has remained steady in the nearly 20 years since the passage of the Delta Protection Act.

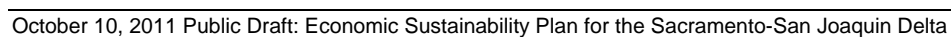
The Legal Delta, including both the Primary Zone and Secondary Zone, contains significant portions of five counties, Contra Costa, Sacramento, San Joaquin, Solano and Yolo, and a small rural corner of Alameda County. The Delta includes parts of several large cities including Antioch, Pittsburg, Stockton, Sacramento, Tracy, and West Sacramento. The legal Delta has a population of 571,000, according to the 2010 Census, which has increased by about 200,000 people—more than 50 percent—in the 20 years since the 1990 Census. All of the population growth, and virtually all of the Delta's urbanized land, is located within the Delta's Secondary Zone.

The Primary Zone economy is export-oriented and creates jobs and income far in excess of the population and workforce that resides in the Primary Zone. The Secondary Zone and the counties surrounding the Delta supply the Primary Zone economy with a workforce, services, manufacturing, and transportation that add value to the agricultural, energy, and other resource-based output of the Delta.

The ESP calculated measures of industry concentration for the Legal Delta with measures of both employment and output, and identified three clear areas of relative concentration: 1) Agriculture; 2) Transportation, Warehousing, and Utilities; and 3) Construction, Housing, and Real Estate. All of these areas are potentially impacted by the Delta Plan. Since there is great interest in recreation and tourism as an economic driver in the Delta, it is significant to note that the tourism-oriented Arts, Entertainment, and Recreation sector tied with Information and Management for the lowest concentration of the 21 industries analyzed in the Legal Delta. However, water-based recreation in the Delta is a significant economic driver, and as discussed in Chapter 8, most of its economic impact is in the retail and hospitality sector.

The Delta Reform Act of 2009 and the Delta Protection Act of 1992 are primarily concerned with the natural resources of the Delta and the economic activity sustained by those resources, such as agriculture and outdoor recreation. In addition, the resources of the Delta support significant water, energy, and transportation infrastructure that serves the Delta, regional, and state economies, and an important commercial and recreational salmon fishery throughout the state. Indeed, an important economic cluster in the Delta is Transportation, Warehousing, and Utilities, and their development is directly dependent on maintaining and enhancing the Delta as a

**Figure A Map of Primary and Secondary Zones of the Sacramento-San Joaquin Delta**



## *Delta Agriculture*

Agriculture is the dominant land use in the Delta. Farmland makes up about two-thirds of the area of the Delta, and nearly 80 percent of all Delta farmland is classified as Prime Farmland, the highest quality designation given by the California Farmland Mapping and Monitoring Program. In contrast, less than 20 percent of all farmland in California is Prime Farmland.

Corn and alfalfa occupy the greatest acreage in the Delta, whereas processing tomatoes and wine grapes generate the most crop revenue. These crops have important links to three value-added manufacturing sectors in the region: wineries, canneries, and dairy products. Asparagus and pears are historically high-value crops in the Delta and continue to be significant contributors, although acreage of both has decreased. The majority of pumpkins and blueberries grown in California come from the Delta and reflect the variety of products. Total agricultural revenues in the Delta were estimated at \$795 million in 2009, including \$702 million in crop revenue and \$93 million from animals and animal products.

Nearly 80 percent of Delta farmland is used for lower-value field and grain crops, pasture, and grazing lands. These lands are important to supporting animal agriculture in the Delta and the larger region, most notably the California dairy industry where scarcity and costs of forage crops has become a challenge. Animal agriculture is less prevalent in the Delta than in other areas of the San Joaquin Valley, but milk is still the fifth most valuable agricultural commodity produced in the Delta, and animal production generates about 12 percent of Delta farm revenue. In contrast, milk is the most valuable agricultural product in San Joaquin County and other nearby areas in the San Joaquin Valley, and the Delta is an important source of local feed.

High-value vineyards, truck, and deciduous crops generate close to 70 percent of crop revenue in the Delta on about 20 percent of the Delta's farmland, and account for 80 percent of the economic impact of Delta agriculture when value-added manufacturing such as canneries and wineries are included. Like other areas in the Central Valley, Delta agriculture is expected to continue a gradual trend towards higher-value crops over time, increasing the contribution of Delta agriculture to the regional economy.

The economic impact analysis estimates that Delta crop and animal production has an economic impact of roughly 9,700 jobs, \$683 million in value added, and \$1.4 billion in output in the five Delta counties. Across all of California, the economic impact of Delta agriculture is approximately 13,000 jobs, \$819 million in value added, and \$1.6 billion in output.<sup>1</sup>

When related value-added manufacturing such as wineries, canneries, and dairy products are included with the impact of Delta agriculture, the total economic impact of Delta agriculture is roughly 13,200 jobs, \$1.059 billion in value-added, and \$2.647 billion in economic output in the five Delta counties. Including value-added manufacturing, the statewide impact of Delta agriculture is about 25,000 jobs, \$2.135 billion in value-added, and \$5.372 billion in economic output. Additional details and analysis of Delta agriculture can be found in Chapter 7 of the Economic Sustainability Plan.

---

<sup>1</sup> The economic impact analysis of agriculture, recreation, and tourism utilizes the IMPLAN model to calculate what are commonly known as the "ripple" effects on other industries such as the purchase of inputs in the local economy and local consumer spending supported by the income. Jobs are reported as annual monthly averages and will vary by season. Value added measures total regional income generated by the activity and is comparable to gross domestic product. Output sums the total revenue of enterprise which is higher than the value added or income created by the enterprise.

## *Delta Recreation and Tourism*

Recreation is an integral part of the Delta economy, generating roughly 12 million visitor days of use annually and approximately \$250 million dollars visitor spending in the Delta each year. Of the roughly 12 million visitor days spent in the Delta each year, approximately 8 million days are for resource-related activities (e.g., boating and fishing), 2 million days are for right-of-way-related and tourism activities (e.g., bicycling and driving for pleasure), and 2 million days are for urban parks-related activities (e.g., picnicking and organized sports).

Boating and fishing have the biggest economic impact, and are estimated to generate nearly 80 percent of the recreation and tourism spending in the Delta, including significant expenditures on lodging, meals, supplies, marina services, and fuel. In addition to visitor spending, non-trip spending such as boat purchases and marina rentals are estimated at roughly \$60 million annually for total recreation-related spending of \$312 million annually in the Delta. Delta recreation and tourism supports over 3,000 jobs in the five Delta counties. These jobs provide about \$100 million in labor income and a total of \$175 million in value added to the regional economy. Across all of California, Delta recreation and tourism supports over 5,200 jobs, and contributes about \$348 million in value added.

Despite significant population growth in the market area, the available data suggests that boating and fishing activity in the Delta has grown little in the past 20 years. Boat registrations, employment at marinas and boating-related industries, and the number of marinas are virtually unchanged over the past two decades. This trend could reflect concerns about water and fishing quality in the Delta, and could also be influenced by the poor economy, high fuel prices, and broader trends in boating and fishing participation across the nation.

While boating and water recreation will remain the largest piece of the Delta recreation industry, land-based activities such as agritourism, wine tasting, wildlife watching, historic and cultural tourism, bicycling, and driving for pleasure are likely to drive future growth in Delta recreation. The majority of visitors to the Delta are from Northern California, an area with great population growth potential but also with nearby locations with successful land-based recreation and tourism economies that compete with the Delta for visitors. The residents of a dozen counties around the Delta represent the principal market for future growth in Delta visitation. This market area has a population of approximately 11.9 million people, and projections indicate this figure could grow by about 50 percent or 5.7 million people by 2050.

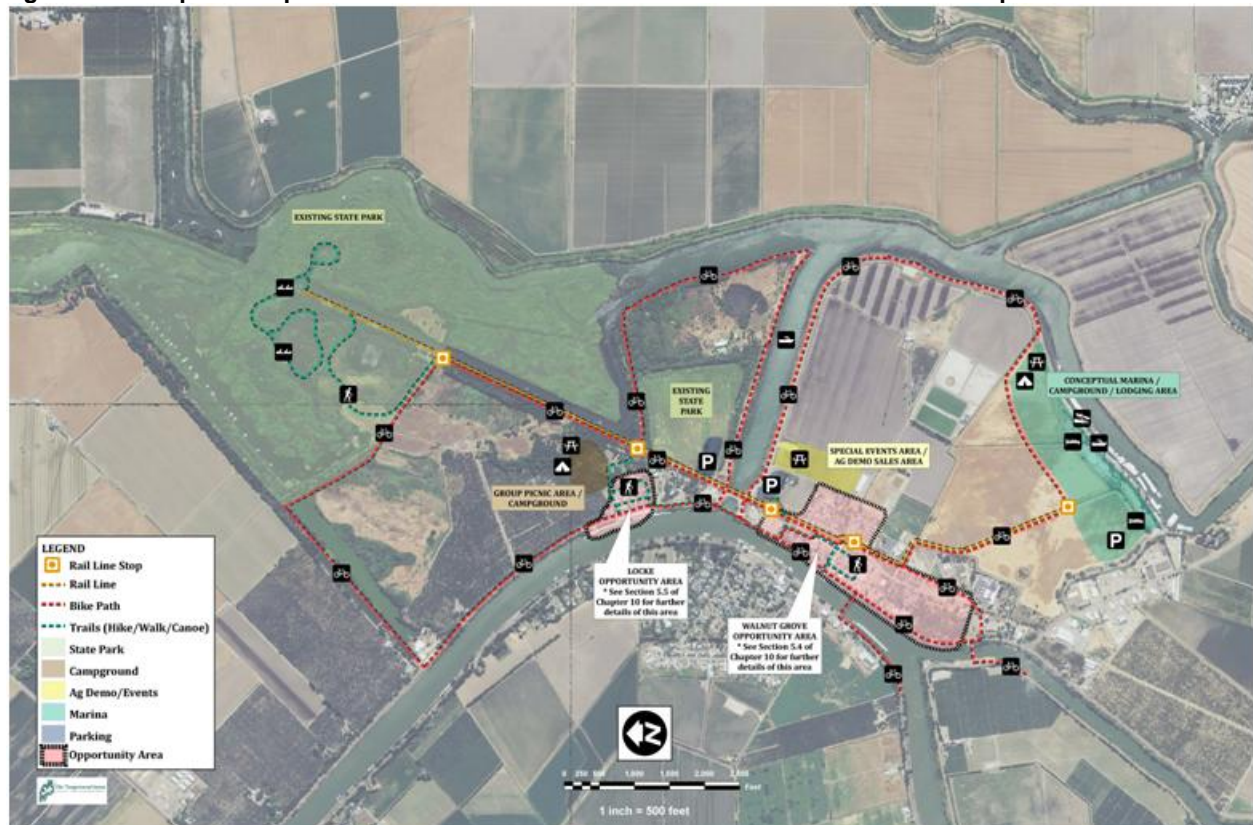
Because of slow expected growth in boating recreation and the relatively small base of land-based tourism in the Delta, we project Delta recreation and tourism will grow more slowly than the regional population. If resource quality and recreational facilities are maintained so that the Delta retains its current level of competitiveness as a recreation destination, visitation could increase by 3.4 million visitor days and in-Delta spending could increase by nearly \$80 million, roughly 35 percent, over 40 years.

A plan for the enhancement of recreation in the Delta centers on five location-based strategies: specific waterways, points of interest, focal point complexes, natural habitat areas, and urban edge areas that surround the Delta. Recreation development in the Delta should be coordinated, consistent, branded, and marketed. A National Heritage Area could be an effective means to brand and coordinate strategies to enhance resource-based recreation, agritourism, and historical and cultural tourism.



Figure B is a conceptual illustration of what a viable focal point complex could look like in the historic area of Walnut Grove and Locke. The figure shows coordinated development of a public park at Delta Meadows with a private sector catalyst development in a modern marina and recreation facility that is tied together with a network of non-motorized trails that include revitalized, historic commercial districts of the Legacy Communities. Successful execution of this type of plan would require improved flood control and a facilitator to encourage and coordinate the public and private investments. Additional details on recreation and tourism enhancement strategies are in Chapter 8 of the Economic Sustainability Plan.

**Figure B Conceptual Proposal for Walnut Grove/Locke/Delta Meadows Focal Point Complex**



### *Delta Infrastructure Services*

The Delta is a critical infrastructure hub for the regional and state economy. While the Delta's importance to the state water system is well-known, its importance to energy, transportation, and in-Delta municipal and industrial water supplies is less appreciated. As discussed in Chapter 5 and mapped in Appendix D, all of these infrastructure services are vulnerable to floods, earthquakes, and sea-level rise, and require the continued maintenance and enhancement of the Delta's levee system.

The Delta is an important energy resource for California. The Delta contains the largest natural gas production field in California, as well as its largest natural gas storage facility below McDonald Island in the central Delta. In addition to heating and cooking, natural gas fuels the majority of California's electricity supply, and natural gas power plants in the five Delta counties, many within the legal Delta, produce 20 percent of California's natural gas-powered electricity. Major electricity transmission lines in the Delta interconnect California with the Pacific Northwest

and carry roughly 10 percent of the state's summer electricity load. Gasoline and aviation fuel pipelines crossing the Delta supply large portions of Northern California and Nevada. Besides these energy resources, wind and solar resources are being studied for further development. Taken together, the Delta's contribution to the state's energy network is comparable to its contribution to the state water system.

The Delta also contains increasingly important parts of the inter-regional transportation network that supports the regional and in-Delta economy. As east-west transportation corridors to the north and south of the Delta become increasingly congested and constrained, the demand for through-Delta transportation is growing rapidly. The ports of Stockton and Sacramento are focal points of regional economic development and rely on through-Delta shipping channels. The ports' marine highway corridor project will increase and diversify the water freight that moves through the Delta and relieve air pollution and traffic in the region. Traffic data shows large increases on highways in the Secondary Zone, as well as through the middle of the Primary Zone on State Route 12, and smaller but significant increases on State Route 4 in the Primary Zone. Through-Delta railways are also an important link in the transportation system.

The Secondary Zone of the Delta and the surrounding counties also draw a significant portion of their municipal and industrial water supplies from the Delta. Changes to Delta water quality—whether an increase in salts or organic carbon—have important effects on urban water supplies in and around the Delta. Significant deterioration of in-Delta water quality could increase water treatment costs by tens of millions of dollars each year and require hundreds of millions of dollars in capital investment in advanced treatment facilities for utilities serving Delta urban areas.

## **Two Key Issues for Economic Sustainability in the Delta**

### *Delta Levees and Economic Sustainability*

Since the early 20th century, the current-day Delta levee system has provided flood control that allows productive agricultural and urban uses of land, channels water for urban and agricultural uses, protects critical infrastructure, and creates a desirable setting for boating and water-based recreation in an environment unique in California. The levee system is the foundation on which the entire Delta economy is built. Therefore, a sustainable Delta economy requires a sustainable levee system.

It has been the goal of the State and the federal government, working through the Department of Water Resources (DWR), the U.S. Army Corps of Engineers (USACE), and the local reclamation districts, to meet the Delta-specific PL 84-99 standard since 1982 when DWR and USACE produced a joint report on the Delta levees, which recommended the basis for this standard. If effectively used, funds currently in the pipeline should bring the Delta levees close to achieving this goal. When these funds have been expended, more than \$698 million will have been invested in improvements to the Delta levees since 1973. These improvements have created significantly improved Delta levees through modern engineering and construction, making obsolete the historical data that is still sometimes used for planning or predicting rates of levee failure.

Three approaches can help all jurisdictions and planners further reduce the risks resulting from the failure of the Delta levees. These approaches are: (1) build even more robust levees, (2) improve both regular maintenance and monitoring and flood fighting and emergency response following earthquakes, and (3) improve preparedness for dealing with failures after they occur. With regard to the first approach, the big question is not whether they should be improved to the

Delta-specific PL 84-99 standard. Instead, the key question is whether in order to support and enhance various in-Delta, regional, State and federal interests they should be improved to a higher standard in order to address hazards posed by not only floods, but also earthquakes and sea-level rise. Our conclusion is that these improvements would be advantageous not only for flood control and protection against earthquakes and sea-level rise, but because they also would allow for planting vegetation on the water side of the levees—an essential component of Delta ecosystem repair. These further-improved levees would have wider crowns to provide for two-way traffic and could easily be further widened at selected locations to allow the construction of new tourist and recreational facilities out of the statutory floodplain.

Improvement of most Delta “lowland” levees, the levees that protect lands below sea-level, and selected other levees to this higher standard would cost \$1 to \$2 billion in base construction costs over the cost of reaching the PL 84-99 standard. Including vegetation and habitat enhancement, total program costs might be in the order of \$4 billion, similar to the cost projected by the PPIC (2007) in their “Fortress Delta” alternative. While the billions of dollars required to build levees to this higher standard is a large investment, it is a cost-effective joint solution that simultaneously reduces risk to all Delta infrastructure. While a \$12 billion investment in isolated conveyance may allow for somewhat larger water exports, it doesn’t protect other critical infrastructure, and billions in additional investments would still be required to protect highways, energy, and other water and transportation infrastructure. Just as a species by species approach is an inefficient and ineffective way to protect ecosystems, a system by system approach is an inefficient and ineffective way to protect the state’s infrastructure. Chapter 5 contains a detailed assessment of the Delta levee system.

#### *Sustainable Legacy Communities: Where the Challenges and Strategies Come Together*

Economic opportunities and constraints facing the Delta’s Legacy Communities mirror those in the broader Primary Zone. The current economies of the Legacy Communities are agriculturally based, providing support services and limited workforce housing for the Primary Zone’s largest industry as well as some housing for retirees and service and professional workers who commute into nearby urban areas such as Sacramento. Despite the current base in agriculture and rural bedroom and retirement communities, much of the revitalization strategies for Legacy Communities are based on growing their appeal as destinations for recreation and tourism. This includes promoting the emerging agritourism sector—including wine and local foods—as an economic development theme.

However, a strict and multi-layered regulatory framework places limits on economic development opportunities within the Delta’s Legacy Communities. The aging and occasionally sub-standard building stock needs improvement, potentially utilizing redevelopment of existing buildings and/or a limited amount of new development in order to accommodate visitor- and local-serving enterprises. New investment is especially important because the existing base of hospitality- and tourism-related enterprises is very limited and insufficient to attract and capture significant tourist activity. The most developed recreation and tourism enterprises in the Delta are campgrounds and marinas that serve water-based recreation; these are mostly located outside the Legacy Communities and often outside the Primary Zone.

An already burdensome regulatory environment has been made significantly worse by the recent remapping of FEMA flood zones. All of the Legacy Communities along the Sacramento River have either been or are in the final process of being remapped into the 100-year floodplain. The requirements of this designation can make major property investments financially infeasible, and many stakeholders are concerned that the flood zone designation could cause the Legacy Communities to slowly wither away. It is clear that the economic



sustainability of the Legacy Communities is dependent on levee and flood-control investments as well as other strategies to address the constraints of flood zone designation.

Despite these challenges, the Legacy Communities have significant historical, cultural, and economic values and the potential to become attractive destinations for visitors and more prosperous, higher quality of life for residents. Chapter 10 includes more detailed visions and strategies for Legacy Communities, including case studies of Walnut Grove, Locke, and Clarksburg.

### **Impact of Water Supply and Ecosystem Restoration Proposals on the Delta Economy**

Current proposals for new water supply and ecosystem restoration projects have serious implications for economic sustainability in the Delta. The isolated conveyance and many habitat restoration proposals are being developed in the Bay Delta Conservation Plan (BDCP), and the Economic Sustainability Plan relies on the November 2010 draft of the BDCP to describe these proposals. In addition, other proposals regarding Delta levees, land use regulation, and economic development have been made by the Delta Stewardship Council, Department of Water Resources, the Public Policy Institute of California, and the Delta Vision Strategic Plan.

Figure C summarizes the estimated impacts of the proposed actions. In Figure C, red shading indicates a negative effect of \$20 million or more annually, orange is negative effect of less than \$20 million annually, yellow represents little or no effect, and green are economic benefits. Three proposals—isolated conveyance, 65,000 acres of tidal marsh, and six-island open water area—have negative effects in all three critical areas of the economy, with a negative impact exceeding \$20 million in at least one area. These proposals are clearly incompatible with economic sustainability at their current levels.

Proposals that would reduce the capacity or affected acreage of these proposals by 70-80 percent (i.e. 3,000 cfs conveyance, under 25,000 acres of tidal marsh, one small flooded island) were not evaluated, but may be consistent with economic sustainability. The other conservation measures have a mix of negative, neutral, and positive effects and could be consistent with economic sustainability with cooperative planning and appropriate mitigation of local impacts. The effects of all these proposals are analyzed in detail in Part 2 (Chapters 6 through 9).

Figure C Summary of Impacts of Policy Scenarios

| Proposals/Impacts  | Agriculture  | Recreation & Tourism   | Infrastructure Services  |
|--|--|--|--|
| <b>1. Isolated Conveyance Facility (15,000 cfs tunnel in dual conveyance system)</b>                       | 1) Water quality losses \$20m-\$80m annually, increased risk<br>2) Footprint displaces \$10m to \$15m in annual crops  | Potential fishing benefits, but negative effects from North Delta intakes and water quality are larger   | 1) Water quality negative impacts on M&I supplies<br>2) Risk of lost support for levee investment  |
| <b>2. Habitat Proposals:</b>   |  |  |  |
| <i>a) Yolo Bypass Fishery Enhancements</i>   | Losses \$1m to \$5m annually, dependent on flood duration  | Potential recreation benefits  | Flood control benefits   |
| <i>b) San Joaquin River Floodplain Restoration</i>   | 1) BDCP proposal - 10,000 acres, up to \$20m annual crop loss<br>2) Paradise cut alternative: 2,000 acres – collaborative plan   | Potential recreation benefits  | Flood control benefits   |
| <i>c) 65,000 acres of tidal marsh restoration</i>  | \$18m to \$77m annual crop losses, low losses in Suisun Marsh/ highest losses in South Delta   | South Delta tidal marsh likely negative recreational impacts   | 1) South Delta & Cache Slough tidal marsh could increase organic carbon in municipal water supplies<br>2) Suisun Marsh and west Delta restoration could have positive impacts on Delta water quality |
| <i>d) "Natural Communities" Protection: 32,000 acres of easements and 8,000 acres rangeland conversion</i> | Agricultural losses range from \$5m to \$25m annually  | Wildlife viewing could generate new recreation visits, although spending is low for this activity.   | Minimal impact   |
| <b>3) Six Island Open Water Scenario</b>   | \$12m in annual crop losses  | Recreation impact very large as located in most popular boating area. Eliminates wind-protected channels and 40% of Delta marinas in immediate area exposed to negative impact | Empire Tract has new Stockton water intake. Organic carbon impact to Stockton water supply, and silting of shipping channel.   |
| <b>4) DSC Covered Actions Regulation</b>   | Potentially large impacts on all sectors. Deter investments with increased cost and uncertainty.   |  |  |
| <b>5) Delta Vision Economic Development Strategies</b>   | National Heritage Area designation could be useful (DPC feasibility study in progress). Delta Investment Fund is useful, but prospects for funding are very uncertain. Other ideas have limited potential and feasibility. |  |  |

## Recommendations for Economic Sustainability in the Delta

The recommendations are organized around eight topics. Considering the recommendations together, the overall strategy is consistent with economic sustainability in the Delta and the coequal goals of increased water supply reliability and ecological restoration. Chapter 12 includes more detailed descriptions and discussion of the proposed recommendations.

### *Levees and Public Safety Recommendations*

- Improve and maintain all non-project levees to at least the Delta-specific PL 84-99 standard ~~using the existing Delta levee subventions and special project programs and U.S. Army Corps of Engineers (USACE) special funding.~~
- Improve most “lowland” levees and selected other levees to a higher Delta-specific standard that more fully addresses the risks due to earthquakes, extreme floods, and sea-level rise, allows for improved flood fighting and emergency response, provides improved protection for legacy communities, and allows for growth of vegetation on the water side of levees to improve habitat.
- Transfer to a regional agency with fee assessment authority on levee beneficiaries ~~Responsibility for allocating funds for the longer-term improvement of Delta levees and the coordination of Delta emergency preparedness, response, and recovery. should be assumed by a regional agency.~~
- In addition to providing funding for longer-term levee improvements, provide on-going funding ~~in the order of \$50 million per year~~ for regular levee maintenance and expanded emergency preparedness, response, and recovery.
- Reduce or eliminate regulatory impediments to action by the creation of a one-stop permitting system for selected activities within the Delta including dredging, levee construction, and ecosystem restoration.

### *General Recommendations for Economic Sustainability*

- Designate a regional agency to implement and facilitate economic development efforts. The main tasks of this entity are: marketing and branding, permitting and regulatory assistance, planning and coordination, and strategically managing the Delta Investment Fund as described in Section 1 of Chapter 11.
- ~~Compensate local governments for lost property taxes and assessments from habitat and development of facilities for export water supply~~ Economic impacts of habitat creation and development of facilities for export water supply should be fully mitigated.
- Land use planning and regulation must be clear and consistent across agencies.

### *Recommendations for the Economic Sustainability of Agriculture*

- Maintain and enhance the value of Delta agriculture.
- Limit the loss of highly-productive farmland to urbanization, habitat, and flooding to the greatest practical extent.

- Protect Delta water quality and water supplies for agriculture.
- Support growth in agritourism.
- Support local value-added processing of Delta crops.

#### *Recommendations for Economic Sustainability of Recreation and Tourism*

- Protect and enhance private enterprise-based recreation with support from state and local public agencies.
- Focus recreation development in five location-based concepts:
  - Enhance Delta waterways
  - Develop dispersed points of interest and activity areas
  - Create focal point destination complexes with natural areas, parks, Legacy Communities, marinas, historic features, and trails
  - Expand public access to natural habitat areas
  - Create recreation-oriented buffers at Delta urban edges
- Implement Economic Sustainability Plan through specific strategies such as consistency planning and regulation refinement, coordination among state and local agencies, obtaining strategic levee protection for Legacy Communities and key recreation areas, designating a marketing and economic development facilitator, and providing key funding for catalyst projects and agencies.

#### *Recommendations for Infrastructure*

- Planning of levee investments must fully consider the economic value of infrastructure services along with all other benefits.
- All owners and operators of infrastructure that depend on Delta levees must contribute to levee system investment and maintenance.
- Protect and improve Delta water quality and supply for agricultural, municipal and industrial uses.
- Ensure that future development of infrastructure in the Delta is aligned with economic sustainability strategies.
- Support expansion and development of the ports.

#### *Recommendations for Habitat and Ecosystem Improvements*

- Emphasize strategies with little or no conflict with the Delta economy such as increased fresh water flows, growth of vegetation on enlarged levees, restoration of mid-channel berms, and reactivation of upstream floodplains.
- Expanded and enhanced flood bypasses can be consistent with economic sustainability if agencies work with local stakeholders to minimize and mitigate economic impacts.

- Tidal marsh habitat plans should be significantly reduced, ~~or eliminated in the interior Delta.~~
- Increased open-water habitat in the ~~interior~~ Delta is not recommended.
- Include recreation facility development in habitat enhancement plans when possible.
- Habitat restoration should start on State-owned land and only occur on private lands with willing sellers.

#### *Recommendations for Water Supply Reliability*

- Continuing ~~the~~ through-Delta conveyance is important to economic sustainability in the Delta and can be consistent with water supply reliability within and outside the Delta, ~~with substantial investments in levees and emergency response and recovery.~~
- A dual conveyance plan with a large, 15,000 cfs isolated conveyance facility has large conflicts with Delta economic sustainability and has high risk for Delta stakeholders.
- ~~Alternative~~ Options to large isolated conveyance must be fully and consistently evaluated.

#### *Recommendations for Research and Monitoring*

- New recreation data is needed and should be updated regularly.
- Maintain an Economic Sustainability Scoreboard to track progress.
- The Delta Science Program should sponsor more engineering and economic studies in addition to ecological research.
- Increase alignment among the various research and planning initiatives.